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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,823

10/20/2003

Akitoshi Kuroda

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07/27/2004

OLIFF & BERRIDGE, PLC  
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EXAMINER

SEVER, ANDREW T

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/687,823

**Applicant(s)**

KURODA, AKITOSHI

**Examiner**

Andrew T Sever

**Art Unit**

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 3 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 5/21/2004. These drawings are acceptable.

### ***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 6-9,13, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohishi et al. (US 6,641,267.)

Ohishi teaches in figure 1 an electronic device comprising:

A casing (2);

A light source mounted in the casing (11a);

A discharge duct (22) in the casing and including an air intake port (22a) facing the light source and a discharge port (22b or 15) to discharge cooling air that is taken from the air intake port and that has cooled the light source; and

A discharge fan (23) mounted between the air intake port and the light source in the casing, the discharge port having an opening area smaller than that of the air intake port, a center of the discharge port being eccentric to a center of the air intake port, and a direction of air flow from the discharge fan being inclined with respect to a direction of the discharge of the cooling air of the discharge port.

*With regards to applicant's claim 2:*

As can clearly be seen the side wall, the center of the discharge port and the center of the air intake port, do not lie on a common line and are therefore all eccentric relative to each other, the fan like the fan shown in applicant's figure 11 appears to direct the air towards the eccentric side wall (the side wall closest to the projection lens.)

*With regards to applicant's claim 6:*

As can clearly be seen the opening area of the discharge port is substantially half of that of the air intake port

*With regards to applicant's claim 7:*

See figure 13, which depicts a louver including a plurality of blades being mounted to the discharge port.

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*With regards to applicant's claim 8:*

The device taught by Ohishi is a projector.

*With regards to applicant's claim 9:*

See with regards to applicant's claims 2 and 8.

*With regards to applicant's claim 13:*

See with regards to applicant's claims 6 and 8.

*With regards to applicant's claim 14:*

See with regards to applicant's claim 7 and 8.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 5, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohishi et al. (US 6,641,267.)

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7. As described above Ohishi teaches a electronic device which is a projector which comprise a light source mounted in a casing. Ohishi further teaches a discharge duct for exhausting air heated by the light source. The discharge duct includes an air intake port facing the light source and a discharge port, wherein the opening of the discharge port is smaller and eccentric to the center of the air intake port. Further a fan is provided between the intake port and the light source.

Ohishi however teaches a rectangular lip in figure 1 instead of a slope, however given elsewhere Ohishi utilizes slope for the same purpose and it was well within the skill of one of ordinary skill in the art to substitute a slope for a lip (for example see US 2004/0125343 to Hara et al. which teaches in figure 11 both lips and slopes), it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a slope instead of the lip (for example as is done on the opposite side), where size of the casing would allow it.

*With regards to applicant's claim 5 and 12:*

Clearly on the discharge port side both sidewalls are parallel.

***Allowable Subject Matter***

8. Claims 3 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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9. The following is a statement of reasons for the indication of allowable subject matter: Claims 3 and 10 claim a bulge which is being understood as the rounded part shown in figure 11 of applicant's figures. Although this is shown in Hara et al., Hara does not teach the subject matter of claim 1 of which claims 3 and 10 are dependent on and there is no motivation to combine Hara with Ohishi to obtain the subject matter of claims 3 and 10, since the bulge of Hara would serve little purpose in Ohishi, given that Hara provides no teaching of its purposes other than redirecting the air and given the housing of Ohishi has a fundamentally different design than Hara the duct itself of Hara would not be functional in Ohishi without modification and in the absence of a motivation to modify it claims 3 and 10 would be allowable if re-written in independent form including the limitations of their base claims and any intervening claims.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,746,125 to Nakano et al. teaches in figure 6 an exhaust fan (50) an duct which is eccentric with an exhaust port 51B.

US 6,497,489 to Li et al. teaches in figure 2 a projector with an exhaust fan before a duct.

US 6,065,838 to Konuma et al. teaches in figure 1 a projector with a tilted exhaust fan.

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US 3,610,747 to Bickel teaches in figure 1 an exhaust duct with a fan (30), and louvers (39).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS



**David Gray**  
Primary Examiner